



## Reacting to unexpected losses in an uncertain world: High approach individuals become even more risk-seeking☆



Xiaoyue Tan <sup>a,\*</sup>, Jan-Willem Van Prooijen <sup>a</sup>, Travis Proulx <sup>b,d</sup>, Haizheng Wu <sup>c</sup>,  
Ilja Van Beest <sup>b</sup>, Paul A.M. Van Lange <sup>a</sup>

<sup>a</sup> Department of Experimental and Applied Psychology, VU Amsterdam, Amsterdam 1081 BT, The Netherlands

<sup>b</sup> Department of Social Psychology, Tilburg University, PO Box 90153, 5000 LE Tilburg, The Netherlands

<sup>c</sup> Department of Educational Science, Twente University, PO Box 217, 7500 AE Enschede, The Netherlands

<sup>d</sup> School of Psychology, Cardiff University, Tower Building, 70 Park Place, Cardiff CF10 3AT, UK

### ARTICLE INFO

#### Article history:

Received 9 September 2016

Received in revised form 23 December 2016

Accepted 30 December 2016

Available online xxxx

#### Keywords:

Risk taking

Losses

Behavioral approach

Expectancy violation

### ABSTRACT

Previous research has shown that people are risk-seeking in the face of losses. We propose that this risk-seeking orientation is a palliative approach response to deal with a discrepancy between people's desire to avoid losses versus the possibility of loss. An expectancy violation (which induces behavioral approach responses) would therefore strengthen people's risk-seeking in the context of losses. Two experiments (Study 1 and Study 2) which were conducted in the context of the Asian Disease Problem demonstrated that people high in trait behavioral approach (trait BA) were more risk-seeking following an expectancy violation (state BA) than in a control condition. As expected, this was only the case for decisions framed in terms of losses, but not in terms of gains (Study 1). Taken together, our findings highlight the interacting motivational influences of situation-induced state behavioral approach and trait behavioral approach in understanding risky decision-making in the face of losses.

© 2017 Elsevier Ltd. All rights reserved.

### 1. Introduction

A Chinese family of 7 members—who were not able to swim—drowned in a reservoir one after another when trying to rescue a child who fell into the water by accident (Jun, 2015). The strong motivation to save a family member in danger is completely understandable. In this case, however, the loss of life could have been significantly reduced if the family members thought twice before taking action. Given that people are generally risk averse (Schneider & Lopes, 1986) the question remains: Why do people make risky decisions when confronted with losses? To answer this question, we focus in particular on Behavioral Approach (BA), representing a system sensitive to signals of reward, non-punishment and escape from punishment (Carver & White, 1994; Elliot & Thrash, 2002; Gray, 1990). BA is understood as both a trait—that is, individual differences in the trait BA (Carver & White, 1994)—as well as a motivational state that can be situationally induced by gain production and loss prevention (Corr & McNaughton, 2012), as well as by anxious uncertainty arising from an expectancy violation, that is, experiences that are not consistent with

people's beliefs or goals (McGregor, Nash, Mann, & Phills, 2010; Proulx, Inzlicht, & Harmon-Jones, 2012). In the present research, we examine how trait and state BA influence risk seeking in the context of losses.

Even though people are found to be risk averse in general (Schneider & Lopes, 1986), some people are more likely than others to take risks in social decision-making, in the sense that they favor a risky option with uncertain outcomes over a more secure option. Sometimes, it is necessary and reasonable to take some risks in order to improve the chances for a better outcome. At other times, however, some risk-taking behaviors are irrational and costly. For example, the impossible rescue attempt from the opening paragraph—which involved jumping in a deep-water reservoir without being able to swim—presumably was carried out without careful consideration of the expected costs and the likelihood of success. Furthermore, some studies have also found a similar phenomenon called “loss chasing”—continued gambling to recover previous losses—among pathological gamblers (Campbell-Meiklejohn, Woolrich, Passingham, & Rogers, 2008). Therefore, it is important to discover the factors that contribute to people's irrational risk-taking decisions in the face of losses.

Several theories have been developed to understand the underlying psychological mechanisms for risk-seeking behavior in the face of losses. Some theories emphasize the psychophysical and cognitive aspects, prospect theory (Kahneman & Tversky, 1979) for example, while some theories focus on the motivational factors that drive people

☆ The authors declare that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

\* Corresponding author at: Department of Experimental and Applied Psychology, VU Amsterdam, Van der Boechorststraat 1, 1081 BT, Amsterdam, The Netherlands.

E-mail address: [x.tan@vu.nl](mailto:x.tan@vu.nl) (X. Tan).

to make risky decisions in the context of losses (Baumeister, 2003; Kühberger, 1997; Lopes, 1987; Scholer, Zou, Fujita, Stroessner, & Higgins, 2010). In the present studies, we propose that because the experience of a loss is often unwanted, unexpected and potentially threatening, people's responses towards losses are driven by a defensive approach motivational state. In particular, we argue that expectancy violation and people's trait behavioral approach play important roles in people's reactions towards losses. Our research findings would extend the motivational accounts for people's risk seeking in reacting towards losses.

### 1.1. Risk seeking under losses

Among the theories that address people's risk seeking under losses, prospect theory (Kahneman & Tversky, 1979) is most well-known. This theory focuses on people's perception of decision problems and the evaluation of probabilities and outcomes. According to this theory, people are loss-averse, meaning that they typically exhibit greater sensitivity to losses than to gains. As a consequence of such loss-aversion, people favor a risky option that offers the probability to restore the status quo, while people prefer a more secure option for the same problem in the context of gains. In other words, loss aversion drives people towards more risky decision-making under losses.

Related theories emphasize the importance of motivations, especially approach motivation, to account for people's risk seeking under losses (Lopes, 1987; Scholer et al., 2010). For example, Lopes (1987) emphasized that the underlying motives to achieve security (i.e., avoidance motivation) or to explore potential (i.e., approach motivation) predispose people to different orientations in response to risks, such that "potential-oriented" individuals are generally risk-seeking, whereas "security-oriented" individuals are generally risk-averse. From this perspective, people's risky decision-making is a result of an interaction of these motives with a situational factor called "aspiration level", which reflects opportunities at hand as well as constraints imposed by the environment. As such, potential-motivated individuals are more likely to take risks under losses, because the risky option offers opportunity of achieving a non-loss state which can satisfy their potential-seeking motives.

In addition, findings from Scholer et al. (2010) suggest that risk-seeking under losses becomes a motivational necessity for those prevention-focused individuals when the risky option alone offers the possibility of eliminating loss. The prevention motivation underlying risk-seeking under losses found in Scholer et al. (2010) corresponds to the behavioral approach state, which can be activated by the omission of negative reinforcers according to the five-element reinforce sensitivity theory (RST-5) proposed by Corr and McNaughton (2012). According to RST-5, the behavioral approach system is one primary affective system that is activated by a concrete positive reinforcer presentation or a concrete negative reinforcer omission. Therefore, risk-seeking options, which may prevent loss, would activate people's behavioral approach system to an approach state in the context of loss. Supporting these perspectives, there is empirical evidence indicating a positive relationship between trait approach orientation and risk-seeking behaviors following losses. For example, subscales of the behavioral approach trait inventory are positively related to increased risk-seeking in the Iowa Gambling Task (IGT) (Suhr & Tsanadis, 2007). As mentioned before, potential-oriented individuals are generally risk seeking under losses (Lopes, 1987).

In line with these motivational accounts, we therefore propose that behavioral approach motivation plays an important role in affecting people's risk seeking under losses. We intended to investigate the motivational roles of expectancy violation, which would induce people into a behavioral approach state, together with people's trait behavioral approach orientation, in affecting people's risk-seeking under losses.

### 1.2. Expectancy violation, approach motivation and risk-seeking

People frequently have experiences that are inconsistent with their beliefs or goals. Such experiences are called expectancy violations,

given that they are inconsistent with mental representations of expected relationships between experiences or goals (Proulx & Inzlicht, 2012). When people's expectations are violated, they experience a common syndrome of aversive arousal, which motivates them to engage in a variety of palliative compensatory efforts (for a review, see Proulx et al., 2012). Some theorists consider expectancy violations as aversive, and suggest a common motivational process underlying people's reactions to these psychological threats (Jonas et al., 2014). It is hypothesized that when individuals face psychological threats, the Behavioral Inhibition System (BIS; McNaughton & Gray, 2000) is initially activated, which evokes anxious vigilance and orients organisms towards the source of the unexpected experience. Subsequent to this BIS arousal, Behavioral Approach System (BAS) activation down-regulates initial anxiety, often by means of palliative approach-oriented reactions, such as increased risk taking. Importantly, people who are predisposed by trait behavioral approach motivation would flip to these reactive approach actions more easily (McGregor et al., 2010; Jonas et al., 2014).

Based on these theories of expectancy violation, we assume that a loss context is an expectancy violation to perceivers, which can drive people into a reactive approach state that motivates approach-oriented actions, for example, risk taking behaviors. Taking these theories and findings together, we propose that people who are high in trait BA would be more easily to be triggered into a behavioral approach state, and then take more risks when they face losses under uncertainty. Therefore, we propose that behavioral approach motivation, which can be induced by an expectancy violation and be activated by loss prevention, is responsible for risk taking under losses, an effect that should be particularly pronounced among people high in trait behavioral approach motivation.

### 1.3. The present research

Based on the idea that people's risk seeking under losses is driven by a reactive behavioral approach state, we expect that after an expectancy violation—which is generally assumed to induce a behavioral approach state (Proulx et al., 2012; McGregor et al., 2010)—people will become more risk seeking (Hypothesis 1). We also propose that there will be a positive relationship between people's risk seeking under losses and their trait behavioral approach motivation (Hypothesis 2). Given that individual differences in dispositional behavioral approach is an important moderator that determines how easily people flip to approach-oriented reactive actions (Jonas et al., 2014), we propose that participants high in trait BA would be especially likely to respond to an expectancy violation in comparison to those low in trait BA. As manifested in the present research, this would lead to a heightened preference for risk for people who are high in trait BA in the expectancy violation condition as compared to the control condition (Hypothesis 3).

The Asian disease problem (ADP) is a classic research setting to investigate loss aversion. The typical result is that people are risk seeking when outcomes are framed as losses, while they are risk averse when outcomes are framed as gains (Kühberger, Schulte-Mecklenbeck, & Perner, 1999; Tversky & Kahneman, 1981). In this task, people are presented with a hypothetical situation whereby 600 people may die from a disease outbreak. In both the gains and losses-framed version of the task, people are asked to choose between a "sure" (a certain number survive) and "risky" (a smaller chance that nearly all survive) option in administering treatment, although the expected survival rates for each option are identical across framings. The only difference between these framings is the language used in presenting the choice options: in the gains framing, the decision is made in terms of the number of people who will "be saved" and in the loss framing, the decision is made in terms of the number of people who "will die".

In the present research, before presenting the Asian disease problem participants either viewed a group of natural upside-down faces in a control condition or a group of anomalous upside-down faces (i.e., the Thatcher Illusion, Lewis & Johnston, 1997) after the first three natural

Download English Version:

<https://daneshyari.com/en/article/5036294>

Download Persian Version:

<https://daneshyari.com/article/5036294>

[Daneshyari.com](https://daneshyari.com)